(19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 3 February 2005 (03.02.2005)

PCT

(10) International Publication Number WO 2005/009951 A3

(51) International Patent Classification7: A61K 31/535, C07D 221/02, 231/02, 263/02

(21) International Application Number:

PCT/US2004/023334

20 July 2004 (20.07.2004) (22) International Filing Date:

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/489,693

24 July 2003 (24.07.2003)

(71) Applicants (for all designated States except US): MERCK & CO., INC. [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). MERCK FROSST CANADA LTD. [CA/CA]; 16711 Trans-Canada Highway, Kirkland, Québec H9H 3L1 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): CHU, Lin [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). GOULET, Mark, T. [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). UJJAIN-WALLA, Feroze [GB/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). FRENETTE, Richard [CA/CA]; 16711 Trans-Canada Highway, Kirkland, Québec H9H 3L1 (CA). GIRARD, Yves [CA/CA]; 16711 Trans-Canada Highway, Kirkland, Québec H9H 3L1 (CA). THERIEN, Michel [CA/CA]; 16711 Trans-Canada Highway, Kirkland, Québec H9H 3L1 (CA). MACDON-ALD, Dwight [CA/CA]; 16711 Trans-Canada Highway, Kirkland, Québec H9H 3L1 (CA). HUTCHINSON, John, H. [CA/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). CHANG, Linda [CA/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(74) Common Representative: MERCK & CO., INC.; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

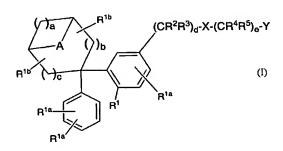
Published:

with international search report

(88) Date of publication of the international search report: 8 December 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DIPHENYL SUBSTITUTED CYCLOALKANES, COMPOSITIONS CONTAINING SUCH COMPOUNDS AND METHODS OF USE



(57) Abstract: The instant invention provides compounds of formula: (I) which are 5-lipoxygenase activating protein inhibitors: formula (I). Compounds of formula (I) are useful as anti-atherosclerotic, anti-asthmatic, anti-allergic, anti-inflammatory and cytoprotective agents.